

Call for Papers International Workshop on Cyber-Physical Systems https://fedcsis.org/iwcps

Within the framework of

FEDERATED CONFERENCE ON COMPUTER SCIENCE AND **INFORMATION SYSTEMS**

https://fedcsis.org/2016/

Gdansk, Poland, 11 - 14 September, 2016

Proliferation of computers in everyday life requires cautious investigation of approaches related to the specification, design, implementation, testing, and use of modern computer systems interfacing with real world and controlling their environment. Cyber-Physical Systems (CPS) are physical and engineering systems closely integrated with their typically networked environment. Modern airplanes, automobiles, or medical devices are practically networks of computers. Sensors, robots, and intelligent devices are abundant. Human life depends on them. Cyber-physical systems transform how people interact with the physical world just like the Internet transformed how people interact with one another.

The event is a continuation and extension of 2006-2010 Real-Time Software FedCSIS workshops and 2013-2015 IWCPS. The objective of the workshop is to assemble and develop a community with main interest in cyber-physical systems.

The workshop will accept papers in the following areas:

Control Systems

- embedded/networked/intelligent
- wireless sensing/actuation
- o adaptive/predictive

Scalability/Complexity

- modularity
- design methodology
- legacy systemstools

Interoperability

- concurrency
- models of computation
- networking
- heterogeneity

Validation and Verification

- assurance
- certification
- simulation

Cyber-security

- intrusion detection
- o resilience
- privacy
- o attack vectors

Applications of CPS

- robotics
- transportation
- military 0
- medical
- o consumer
- manufacturing
- o power systems

CPS Education

- o curriculum development
- web-based laboratories
- o academic courses
- o pedagogy issues

Important Dates:

Draft paper submission: April 18, 2016 Position paper submission: May 30, 2016 Acceptance decision: June 13, 2016 Final version of paper submission: July 04, 2016 Final deadline for discounted fee: July 31, 2016

Conference dates: September 11-14, 2016

IWCPS Workshop Day: **TBD**

Paper Submission and Publication:

- Authors should submit draft papers (as Postscript, PDF of MSWord file).
- The total length of a paper should not exceed 10 pages IEEE style (including tables, figures and references). IEEE style templates are available at: https://fedcsis.org/2016/for_authors
- Papers will be refereed and accepted on the basis of their scientific merit and relevance to the workshop.
- Preprints containing accepted papers will be published on a USB memory stick provided to the FedCSIS participants.
- Only papers presented at the conference will be submitted for inclusion in the IEEE Xplore® database.
- Conference proceedings will be published in a volume with ISBN and ISSN numbers and posted at the conference WWW site.
- Conference proceedings will be indexed in BazEkon and submitted for indexation in: Thomson Reuters - Conference Proceedings Citation Index, SciVerse Scopus, Inspec, Index Copernicus, DBLP Computer Science Bibliography and Google Scholar
- Extended versions of selected papers presented during the conference will be published as Special Issue(s).
- Organizers reserve right to move accepted papers between the FedCSIS events.

IWCPS Gdansk 2016 - Steering Committee:

Wojciech Grega wgr@agh.edu.pl, AGH University of Science and Technology, Poland **Andrew J. Kornecki** kornecka @erau.edu, Embry Riddle Aeronautical University, USA

Libero Nigro *I.nigro* @unical.it, Università della Calabria, Italy

Tomasz Szmuc tsz@agh.edu.pl, AGH University of Science and Technology, Poland

IWCPS Gdansk 2016 - Program Committee (tentative):

Manfred Broy, Technische Universitaet Muenchen, Germany

Albertas Caplinskas, Vilnius Institute of Mathematics and Informatics, Lithuania

Franco Cicirelli, Università della Calabria, Italy Matjaz Colnaric, University of Maribor, Slovenia

Alfons Crespo, Universitat Politecnica de Valencia, Spain

Frank Golatowski, University of Rostock, Germany Luis Gomes, Universidade Nova de Lisboa, Portugal

Luis Goilles, Oliversidade Nova de Lisboa, Fortug

Wolfgang A. Halang, Fernuniversitaet, Germany

Thomas B. Hilburn, Embry Riddle Aeronautical University, FL, USA

Janusz Kacprzyk, Systems Research Institute PAN, Poland

Phillip A. Laplante, PennState, PA, USA

Jacek Malec, Lund University, Sweden

Leo Motus, Tallinn University of Technology, Estonia

Simin Nadjim-Tehrani, Linköping University, Sweden

Jerzy W. Rozenblit, University of Arizona, AZ, USA

Ondrei Rysavy, Brno University of Technology, Czech Republic

Bo Sanden, Colorado Technical University, CO, USA

Igor Schagaev, London Metropolitan University, United Kingdom

Remzi Seker, Embry Riddle Aeronautical University, USA

Miroslav Sveda, Brno University of Technology, Czech Republic

Leszek Trybus, Politechnika Rzeszowska, Poland

Tullio Vardanega, University of Padova, Italy

Tiziano Villa, University of Verona, Italy

Dieter Zoebel, University Koblenz-Landau, Germany